

NEW RECORDS OF CHECKERED BEETLES (COLEOPTERA: CLERIDAE)
FROM HAINAN ISLAND, CHINA, WITH A
KEY TO THE KNOWN SPECIES

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Abstract.—The following 18 species of Cleridae (Coleoptera) are recorded from Hainan Island, China, for the first time: *Orthocladiscus dimorphus* (Lesne); *Cylidroctonus chalybaeum* (Westwood); *Tilloidea notata* (Klug); *Callimerus amabilis* Gorham; *Callimerus chinensis* Schenkling; *Callimerus cyaneus* (Thomson); *Opilo mollis* (Linnaeus); *Orthrius striatopunctatus* Schenkling; *Orthrius sinensis* Gorham; *Orthrius binotatus* (Fisher); *Trichodes ircuitensis* (Laxmann); *Tillicera cleroides* Gorham; *Thanasimus substriatus* (Gehler); *Omadius clytiformis* Westwood; *Omadius mediofasciatus* Westwood; *Omadius fasciipes* Westwood; *Dasyceroclerus ignavus* (Westwood); *Stigmatium mutillaecolor* (White). The placement of two *nomina nuda* created by Hua is discussed. A key to the 18 species of Cleridae known from Hainan Island is provided.

Key Words: Coleoptera, Cleridae, Hainan Island, China

I was recently given the opportunity to examine the entire collection of Cleridae in the collection of Zhongshan (Sun Yatsen) University, including 144 specimens of 18 species of Cleridae (listed below) which were collected on Hainan Island by J. L. Gressitt and F. K. To. No species of Cleridae were recorded from Hainan Island in the most recent catalogue of the family (Corporaal 1950); however, 48 of the specimens on which the present communication is based were listed by Hua (1989: 57), but not noted as occurring on Hainan Island. The names published by Hua in his list are based mostly on misidentifications by J. L. Gressitt and unfortunately included two *nomina nuda*, which are discussed below.

I have provided below a list of the material from Hainan Island which I examined and accompanying collecting information,

as well as a key to the species of Cleridae known from Hainan Island.

MATERIALS

Most of the specimens on which the present communication is based are housed in the collection of the Taxonomy Division, Institute of Entomology, Zhongshan (Sun Yatsen) University, Guangzhou, China. Duplicate specimens of several species have been deposited in the author's personal collection and in the collection of the Museum of Comparative Zoology. Collecting information accompanying the specimens examined is provided for each species in the list below. I examined type specimens relevant to this study in the collections of the following institutions: The Natural History Museum, London; Hope Department of Entomology, Oxford University; Museum

National d'Histoire Naturelle, Paris; Museo Civico di Storia Naturale, Genova.

Family Cleridae

Orthocladiscus dimorphus Lesne: 1 specimen, collected May 12–20, 1932, Kachek, K'iung-tung District.

Cyldroctonus chalybaeum (Westwood): 1 specimen, collected August 31, 1958.

Tilloidea notata (Klug): 1 specimen, collected May 10, 1959.

Callimerus amabilis Gorham: 1 specimen, collected June 9, 1932, 2000 feet, 6 miles southeast of Nodoa, Lin-Kao and Ch'eng-mai Districts.

Callimerus chinensis Schenkling: 5 specimens, collected July, 1940.

Callimerus cyaneus (Thomson): 2 specimens; 1 collected May 27–28, 1932, Lin-kao District; 1 collected June 14, 1935, Ta Hian.

Opilo mollis (Linnaeus): 2 specimens.

Orthrius striatopunctatus Schenkling: 1 specimen, collected June 13–15, 1935, back of Lai-mo-ling mountain range, Ting-an District.

Orthrius sinensis Gorham: 3 specimens; 2 collected March 1948; 1 collected April, 1918.

Orthrius binotatus (Fisher): 1 specimen, collected September, 1958.

Trichodes ircuitensis (Laxmann): 4 specimens; 2 collected June, 1985; 1 collected July, 1977; 1 collected August, 1977.

Tillicera cleroides Gorham: 1 specimen, collected July 12–13, 1932, 9 miles south of Nodoa, Tan-hsien District.

Thanasimus substriatus (Gebler): 1 specimen, collected July 23–30, 1977.

Omadius clytiformis Westwood: 5 specimens, collected June 7–20, 1935, back of Lai-mo-ling mountain range, Ting-an District.

Omadius mediofasciatus Westwood: 27 specimens; 26 collected June–August, 1935, back of Lai-mo-ling mountain range, Ting-an District; 1 specimen collected July 22, 1935, Dwa-Bi.

Omadius fasciipes Westwood: 2 specimens, collected June 7–12, 1935, back of Lai-mo-ling mountain range, Ting-an District.

Dasyceroclerus ignavus (Westwood): 96 specimens, collected April–July, 1935, back of Lai-mo-ling mountain range, Ting-an District.

Stigmatium mutillaecolor (White): 1 specimen, collected July 17, 1935, Fan Ta.

KEY TO SPECIES OF CLERIDAE RECORDED FROM HAINAN ISLAND

- | | | |
|----------|---|--|
| 1a. | Procoxal cavities closed (Subfamily Tillinae) | 2 |
| 1b. | Procoxal cavities open | 4 |
| 2a.(1a.) | Body five times longer than wide, uniformly dark reddish-brown; antennae pectinate; elytra striatopunctate to apices <i>Orthocladiscus dimorphus</i> (Lesne) | 3 |
| 2b. | Body more robust, not uniformly dark reddish-brown; antennae serrate; elytra striatopunctate on basal half only | 3 |
| 3a.(2b.) | Integument metallic blue with the exception of an elevated transverse orange fascia located postmedially on elytra; pronotum robust, strongly rounded laterally | .. <i>Cyldroctonus chalybaeum</i> (Westwood) |
| 3b. | Integument predominately black, basal third of elytra reddish-brown; each elytron with an arcuate white median macula; pronotum nearly parallel-sided | <i>Tilloidea notata</i> (Klug) |
| 4a.(1b.) | Antennae short, not attaining base of pronotum, terminating in a 2-segmented club; integument metallic bluish-black with patches of reclinate white pubescence (Subfamily Phyllobaeninae) | 5 |
| 4b. | Antennae elongate, attaining base of pronotum, serrate, filiform, or terminating in a 3-segmented club; integument usually brown or black, if metallic blue then lacking patches of reclinate pubescence (Subfamily Clerinae) | 7 |
| 5a.(4a.) | Elytral surface densely and rugulose punctate, not shining, predominantly black | <i>Callimerus amabilis</i> Gorham |
| 5b. | Elytral surface finely and sparsely punctate, shining, predominantly metallic blue | 6 |
| 6a.(5b.) | Overall length 13.0–16.0 mm | <i>Callimerus cyaneus</i> (Thomson) |

- 6b. Overall length 7.0–9.0 mm
 *Callimerus chinensis* Schenkling
- 7a.(4b.) Ocular facet diameter 0.30 mm or
 greater 8
- 7b. Ocular facet diameter less than 0.30
 mm 11
- 8a.(7a.) Terminal segment of labial palpi tri-
 angular *Opilo mollis* (Linnaeus)
- 8b. Terminal segment of labial palpi sub-
 ulate 9
- 9a.(8b.) Integument uniformly reddish-brown;
 elytra deeply striatopunctate on basal
 half, dull
 *Orthrius striatopunctatus* Schenkling
- 9b. Integument dark brownish-black, ely-
 tra with yellowish-orange maculae; ely-
 tra feebly striatopunctate, shining 10
- 10a.(9b.) Legs reddish-orange; each elytron with
 3 yellowish-orange maculae
 *Orthrius sinensis* Gorham
- 10b. Legs dark brownish-black; each ely-
 tron with 2 yellowish-orange maculae
 *Orthrius binotatus* (Fisher)
- 11a.(7b.) Antennae terminating in a large trans-
 verse 3-segmented club; elytra finely
 and irregularly punctate, shining, met-
 allic blue with two transverse orange
 fasciae *Trichodes irecutensis* (Laxmann)
- 11b. Antennae and elytra not exactly as de-
 scribed above 12
- 12a.(11b.) Elytra elongate, length/width ratio 1.7:
 1.0 to 2.1:2.0 13
- 12b. Elytra robust, length/width ratio 1.3:
 1.0 to 1.6:1.0 17
- 13a.(12a.) Pronotum strongly robust; elytra deeply
 striatopunctate basally; integument pre-
 dominantly black; pronotum and basal
 third of elytra red; elytra with three
 patches of yellow pubescence
 *Tillicera cleroides* Gorham
- 13b. Pronotum parallel-sided; elytra not
 deeply striatopunctate basally; if col-
 oration as described above then pos-
 sessing white pubescence on elytra 14
- 14a.(13b.) Integument predominantly black; pro-
 notum and base of elytra red; elytra
 with two narrow transverse bands of
 white pubescence
 *Thanasimus substriatus* (Gebler)
- 14b. Integument predominantly yellowish-
 brown; elytra with three transverse
 black maculae 15
- 15a.(14b.) Elytra uniformly covered with short
 pubescence concolorous with the un-
 derlying maculae 16
- 15b. Elytra lacking such pubescence, basal-
 ly reddish
 *Omadius clytiformis* Westwood

- 16a.(15a.) Elytra with rows of minute tubercles
 on basal fourth; basal and apical dark
 transverse maculae both reduced to a
 pair of round maculae on each elytron,
 median dark transverse maculae very
 broad
 *Omadius mediofasciatus* Westwood
- 16b. Elytra lacking such tubercles; all 3 pairs
 of dark transverse maculae subequal
 in size *Omadius fasciipes* Westwood
- 17a.(12b.) Antennae filiform; integument pre-
 dominantly greenish-grey to reddish-
 brown; elytra with irregular narrow
 black transverse maculae
 *Dasyroclerus ignavus* (Westwood)
- 17b. Antennae serrate; integument predomi-
 nantly black, elytra red on basal third;
 pronotum and elytra each with two
 transverse bands of white pubescence
 *Stigmatium mutillacolor* (White)

NOTES ON SYSTEMATICS

As was noted above, Hua (1989: 57) introduced two *nomina nuda*: *Callimera* and *Cynetocera*. *Callimera* is obviously a corruption of *Callimerus* Gorham, while *Cynetocera* appears to be a misspelling of the Nearctic genus *Cymatodera* Gray. A specimen of *Orthrius striatopunctatus* Schenkling was misidentified in the Zhongshan University collection as “*Cymatodera* sp.” by J. L. Gressitt.

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